UCSF
Newsbreak

News for the UCSF Campus Community

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Supreme Court lets Prop 209 stand

The US Supreme Court on Monday denied an appeal by civil rights groups seeking to halt implementation of Proposition 209, the controversial California law to end affirmative action programs.

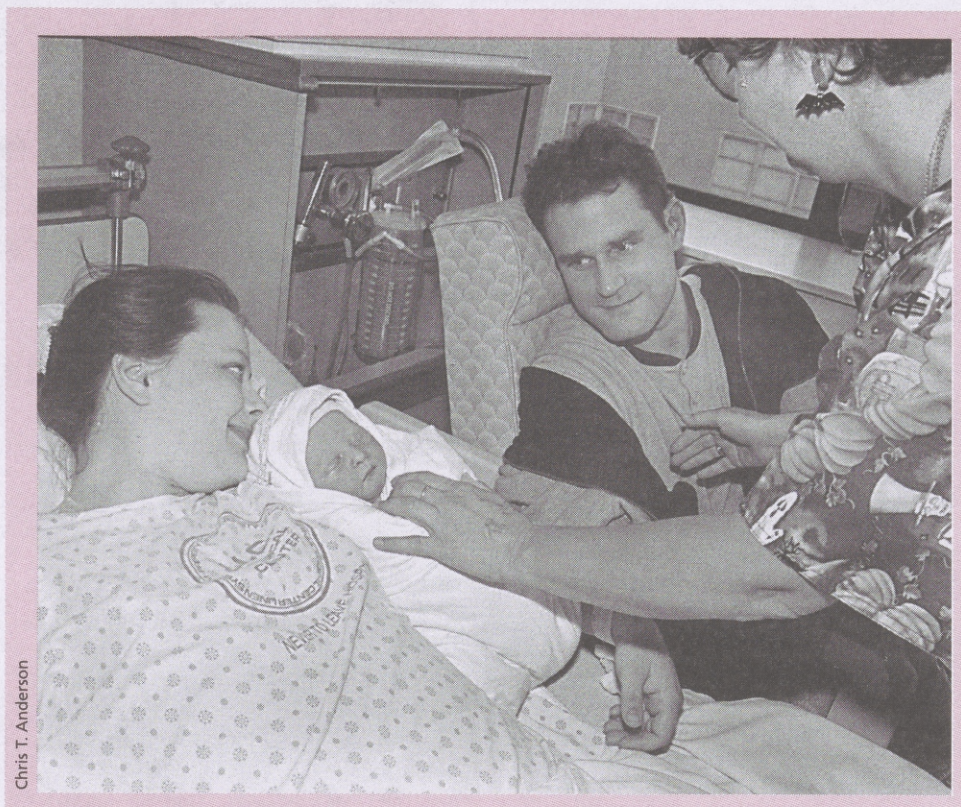
In rejecting the constitutional challenge without any comment or dissent, the high court lets stand the measure, passed by state voters last year, barring state and local governments from granting preferential treatment based on race or gender in public employment, education and contracting.

The decision was a setback for civil rights groups and some local governments, which had argued that the measure would force agencies to end affirmative action programs designed to remedy past discrimination. The ruling, however, came as no surprise, considering that the Supreme Court in September refused to block enforcement of the law.

The Supreme Court's action does not set a nationwide precedent, but allows California to implement the law. It also could encourage other states to adopt their own measures. More than 20 other states are working on similar laws.

The Supreme Court's decision came on

(See **Prop 209** on page 6)



Chris T. Anderson

The debut of two

Day one of UCSF Stanford Health Care at the medical center also brought the Nov. 1 birth of Jasmine at 4:02 a.m. who weighed in at 8 pounds, 11 ounces. Her proud parents, Theresa Goines and Dan Jensen, look on as does nurse Kerry Cobbledick.

Researchers clone gene vital for vitamin D metabolism

By JENNIFER O'BRIEN

The five-year effort to identify an elusive enzyme critical for vitamin D metabolism has paid off, according to Walter Miller and Anthony Portale, professors of pediatrics at UCSF.

They report that they have cloned the gene for the 1 alpha hydroxylase enzyme, which plays a central role in converting vitamin D into the active hormone so essential for bone growth and health. If the gene is missing or mutated, or the enzyme itself is damaged and cannot function in cells, the body cannot complete the final key step in vitamin D synthesis.

By identifying the gene that directs the synthesis of an enzyme, scientists are able to determine how the enzyme is regulated at the molecular level.

The discovery opens the door to a new realm of research on the regulation of vitamin D. Ultimately, it could lead to greater understanding of the many disorders involving abnormal vitamin D metabolism, including bone loss in aging.

"We don't know how the gene for this enzyme is regulated," says Portale. "But now we can study that. And in so doing, we may be able to find ways to correct abnormal vitamin D metabolism by regulating the enzyme directly — increasing it or decreasing it as necessary."

The UCSF researchers cloned the gene and verified their discovery through an elegant sequence of molecular laboratory studies involving human skin cells. But they then went a step farther, cross-checking their finding by determining that the gene for the 1 alpha hydroxylase enzyme is mutated — and thus nonfunctional — in individuals with hereditary vitamin D-dependent rickets.

Children with this disease cannot metabolize vitamin D to its active hormonal form, and as a result, have difficulty growing healthy bone. They grow poorly, have abnormal teeth and develop rickets, or deformed bones. The symptoms are improved by treatment with a synthetic form of the active vitamin D hormone.

"This rare disease offered us a glimpse into a more common situation," says Portale, whose pediatric clinical practice focuses on vitamin D disorders in children with kidney disease.

While a genetic lack of the enzyme occurs in only a few diseases, an acquired

(See **Vitamin D** on page 7)

Study finds new indicator of breast cancer recurrence

By JEFFREY NORRIS

Whether or not breast cancer returns after surgery may be better predicted using a new laboratory test, according to a team of researchers led by UCSF physician Ira Goldfine.

About 30 percent of women whose breast cancer has not spread to the lymph nodes at the time of diagnosis experience a reappearance of cancer within five years of surgery. This raises issues about how much additional treatment these node-negative women should receive after the tumor mass has been surgically removed.

In the November issue of the Proceedings of the Association of American Physicians, Goldfine, professor of medicine, along with an international team of research collaborators, report on a study of tumor tissue from 584 women with node-negative breast cancer.

They found that breast cancers were less likely to return within five years of surgical removal when the cells within the tumor harbored normal amounts of insulin receptors. Insulin receptors are proteins that sit on cell surfaces and transmit growth-and-metabolism-regulating signals into cells upon attachment to the hormone insulin.

Insulin receptors appear to be as good or better than previously identified indicators for predicting disease-free survival, says Goldfine, an expert in the study of insulin and insulin receptors.

According to Debu Tripathy, a breast cancer specialist and assistant clinical professor of medicine at UCSF, "Breast cancer is now more likely to be diagnosed earlier, and node-negative breast cancers therefore make up an increasing percentage of all breast cancers. It is difficult to gauge the risk of recurrence in node-negative cancers, yet our perception of this risk is one of the biggest determinants of whether or not to use hormonal treatment or chemotherapy.

"This study indicates that the presence or absence of insulin receptors may be very useful in determining who should receive treatment, although further studies should be done to determine whether insulin receptors should be used routinely in making decisions for patients."

The techniques used in the study to quantify insulin receptors on cancer cells and the percentage of cancer cells exhibiting insulin receptors could be adapted for clinical laboratory use, Goldfine says.

Goldfine and colleagues used samples from tumor specimens that have been stored as part of a "tissue bank" maintained for scientific study at the University of Texas, San Antonio. The researchers examined breast cancer tissue from women ranging in age from 27 to 92. The women's health status was monitored for an average of 65 months.

Previously identified prognostic indicators — including large tumor size, the absence of progesterone receptors, the presence of an abnormal form of a tumor-associated protein called p53, and rapid tumor-cell replication — were all confirmed as independent risk factors for cancer recurrence in the current study. However, the absence of insulin receptors appeared to signal a stronger likelihood that cancer would recur than did these other indicators, according to Goldfine.

Goldfine suggests that, compared to tumor cells lacking the insulin receptor, tumor cells with a normal amount of insulin receptors may be more similar to normal cells and more subject to normal controls on cell growth, and therefore less likely to grow back aggressively.

Co-authors of the study include Riccardo Vigneri of the University of Catania, in Catania, Italy; Marie-Christine Mathieu of the Institut Gustave Roussy, Villejuif Cedex, France; and Gary Clark and D. Craig Allred of the University of Texas Health Science Center at San Antonio.

The research was funded by the John A. Kerner Foundation, the Jay Gershow Cancer Research Fund, the Ladies Auxiliary of Veterans of Foreign Wars, and by the National Institutes of Health.

Elderly Chinese women still hurt by foot-binding custom

By REBECCA HIGBEE

The ancient Chinese custom of foot binding has caused severe life-long disability for many millions of elderly women, even in today's China, according to a UCSF study published this week in the American Journal of Public Health.

Part of a larger study of osteoporosis in China, this is the first look at the prevalence and consequences of foot binding, says lead author Steven R. Cummings, UCSF professor of medicine and epidemiology and biostatistics.

UCSF researchers examined a randomly selected sample of 193 women, all at least 70 years old, in Beijing. They found that 38 percent of women in their 80s and 18 percent of those in their 70s had bound foot deformities.

In fact, the simple act of relieving their bladders is more of a hardship for the women whose feet were painfully stunted in the cultural practice. "Women with deformed feet were far less able to squat, an ability that is particularly important to toileting and other daily activities in China," Cummings says.

The 80-year-olds who endured the practice were more likely to have fallen during the previous year than women with normal feet (38 percent vs. 19 percent) and were less able to rise from a chair without assistance (43 percent vs. 26 percent).

In addition, the study found that women with bound feet had 5.1 percent lower hip bone density and 4.7 percent lower spine bone density than women with normal feet, putting them at greater risk of suffering hip or spine fractures.

"Despite the difficulties we observed, women with bound feet did not have greater difficulty preparing meals, walking or climbing steps," Cummings says, adding that these women may have adjusted to their impairments or may be reluctant to complain.

"The high prevalence of bound feet might surprise some foreigners who have visited China, since women with bound feet are not seen very often on city streets," Cummings says. "However, these women tend to stay indoors and in residential areas not commonly visited by tourists."

The practice of foot binding began in the Sung dynasty (960-976 BC), reportedly to imitate an imperial concubine who was required to dance with her feet bound. By the 12th century, the practice was widespread and more severe —

(See **China** on page 7)

Institute of Medicine selects four from UCSF

Four UCSF faculty were among 60 new members elected to the Institute of Medicine, part of National Academy of Sciences.

The four recently named to the prestigious institute were: Howard L. Fields, professor of neurology and physiology; Kevin Grumbach, associate professor, department of family and community medicine and the Institute for Health Policy Studies; Zach W. Hall, a UCSF professor of physiology, who has been on leave to head the National Institute of Neurological Disorders and Stroke, but will return to UCSF next month to become associate dean for research; and A. Eugene Washington, professor and chair, department of obstetrics, gynecology and reproductive sciences.

The 60 new members elected to the Institute raises the total active membership to 558.

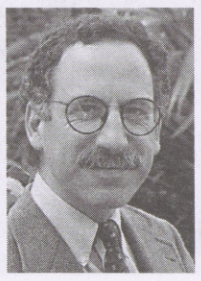
Election to the Institute is considered an honor and obligation to work on behalf of the organization, its governance, and its studies. With their election, members make a commitment to devote a significant amount of volunteer time on committees engaged in a broad range of studies on health policy issues. Current IOM projects include a continuing series of reports on dietary reference intakes, which will replace the 1989 Recommended Dietary Allowances, and studies on community-based drug treatment, control of cardiovascular diseases in developing countries, and the medical use of marijuana.

Fields

Howard L. Fields: A member of the Keck Center for Integrative Neurosciences at UCSF and the new Center for Neurobiology of Addiction, Fields has researched the mechanisms of pain and was instrumental in establishing the Pain Management Center at UCSF. Known internationally for his research on the nerves in the body that alter our perception of pain, Fields has received numerous awards, including the J. Elliot Royer Award in 1990.

One of Fields' most significant research findings was demonstrating that psychological factors can affect the endorphin system, in particular, that placebos — innocuous sugar pills — work as pain killers by stimulating this system. In collaborating with UCSF anatomist Allan Bausbaum, Fields also discovered a major pain-control pathway in the brain and spinal cord, the one through which endorphins act, that is important for the action of morphine and other powerful pain-relieving drugs.

Kevin Grumbach: A research director of the Pew Health Professions Commission and co-investigator at the UCSF/San Francisco General Hospital Medical Effectiveness Research Center (MERC) for Diverse Populations, Grumbach is currently working on several research projects in the areas of primary care, health care workforce reform and racial differences in cardiac disease.


Grumbach

Grumbach has lectured widely on health care reform and health policy and has received a Generalist Physician Faculty Scholar award from the Robert Wood Johnson Foundation. Grumbach co-authored the book, "Understanding Health Policy — A Clinical Approach," published in 1995 by Appleton-Lange. Portions of the book have been excerpted in serial form by the Journal of the American Medical Association.

Zach W. Hall: Currently serving as director, National Institute of Neurological Disorders and Stroke and chief, synaptic mechanisms section, National Institute of Mental Health, Bethesda, MD, Hall will return to UCSF as associate dean for research, a new position in the School of Medicine. He also will oversee Organized Research Units and General Clinical Research Centers for the medical school and will play a key role in planning medical school research programs for Mission Bay.

Hall

In his research, Hall has concentrated on investigating how muscle movement is activated by nerves at the junction between these two tissue types. Hall has focused his studies on development of the neuromuscular junction and on the receptor molecules that receive the signals from acetylcholine. He is also interested in malfunctions of this junction, such as those that give rise to the disease myasthenia gravis.

Hall is the author and editor of a widely used textbook, "An Introduction to Molecular Neurobiology," and he is the founding editor of Neuron, a leading journal of cellular and molecular neurobiology. He has published more than 100 original scientific papers and reviews. A member of the Medical Advisory Board of the Howard Hughes Medical Institute and of the Dana Foundation Alliance for the Decade of the Brain Initiative, he is a fellow of the American Academy of Arts and Sciences and an honorary member of the American Neurological Association.

A. Eugene Washington: Director of MERC for Diverse Populations, Washington is nationally known for his research in ob/gyn, epidemiology and health policy. His major areas of research include the effectiveness of health services, particularly in diverse, ethnic populations, prevention of diseases in women, and patient preference in health care decision making.

Washington has served on a number of national panels for the US Department of Health and Human Services' Agency for Health Care Policy Research, CDC, National Institutes of Health, and the National Academy of Science's Institute of Medicine. He is a board member of the International Society for Sexually Transmitted Diseases Research and has been a consultant for the World Health Organization on a number of issues, including AIDS in mothers and infants and treatment of sexually transmitted diseases.

Washington

Recently, he was named co-director of a UCSF and Stanford program designed to help clinicians, patients, health care providers, and health plans sort through the myriad of options and information available for common medical conditions. Washington has published numerous papers on a variety of topics.

Private Support

UCSF is pleased to acknowledge the following listing of gifts/pledges of $25,000 or more from individuals, corporations and foundations received October 19-25, 1997.

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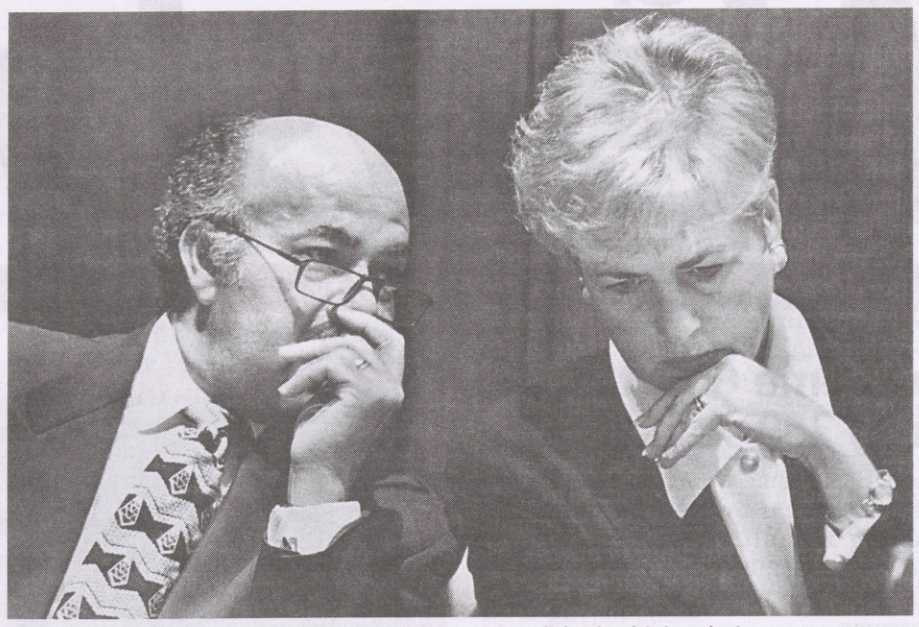

Chris T. Anderson

UC Regent Ward Connerly confers with Regent Meredith Khachigian during a recent meeting at Laurel Heights.

Regents re-elect Khachigian as chair

For the third time in the past six years, Meredith J. Khachigian has been chosen by her colleagues to chair the University of California Board of Regents.

The Regents elected Khachigian by a unanimous vote in a special meeting conducted by teleconference Oct. 30. Her appointment as chair of the 26-member governing board is effective immediately and continues through June 1998.

Khachigian's election marks the fourth time Regents have named a woman as their chair in UC's 129-year history and the third time a Regent has returned to the chairmanship after having served two consecutive terms. Khachigian chaired the board in 1991 and 1992.

As chairman, Khachigian fills a vacancy created by the departure from the board of Tirso del Junco, whose reappointment as a Regent was rejected by the state Senate.

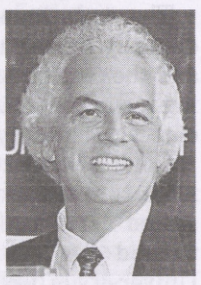
Khachigian, 52, is a UC Santa Barbara graduate who consults on community and public affairs and has a long record of service related to education in California.

Gov. George Deukmejian appointed her to a vacant position on the UC Board of Regents in 1987 and reappointed her in 1989 to a full 12-year term. She lives in San Clemente in Orange County.

Prusiner wins Horwitz Prize

Stanley B. Prusiner, UCSF professor of neurology and biochemistry, was awarded the 1997 Louisa Gross Horwitz Prize at Columbia University on Oct. 23.

Prusiner, winner of this year's Nobel Prize in Medicine, was honored for his groundbreaking work on prions, a protein capable of transmitting degenerative neurological diseases.


Prusiner

The Louisa Gross Horwitz Prize, established in 1967, is given annually for outstanding research in biology or biochemistry. Research previously recognized by other awards, such as the Nobel Prize, is not eligible. The Horwitz Prize committee selected Prusiner for the award in May.

Prusiner's work on prions has generated much controversy. "At many junctures, the criticisms of both Dr. Prusiner and his work were severe," says David I. Hirsh, the Robert Wood Johnson Jr. Professor and Chairman of the department of biochemistry and molecular biophysics at Columbia-Presbyterian Medical Center and chairman of the Horwitz Prize committee.

"Nonetheless, Dr. Prusiner persisted and has almost single-handedly constructed the arguments that have led to widespread acceptance of his work."

The Louisa Gross Horwitz Prize was established under the will of the late S. Gross Horwitz in memory of his mother. She was the daughter of Samuel David Gross (1805-1889), a prominent Philadelphia surgeon who pioneered methods of suturing nerves and tendons, and later served as president of the American Medical Association. Since the Horwitz Prize was first presented in 1967, more than half of its recipients have gone on to win the Nobel Prize in Physiology or Medicine, or in Chemistry.

AAAS names Prusiner a fellow

Neurologist Stanley B. Prusiner can add another feather to his cap. He has been selected by the American Association for the Advancement of Science (AAAS), the world's largest federation of scientists, as a fellow among 270 selected nationwide for their outstanding contributions toward scientific or social advancement.

The AAAS selected 34 University of California members, which represent over 12 percent of the national total selected this year.

Established in 1848, the AAAS has more than 140,000 members today. It publishes the scholarly weekly journal, Science.

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Deadline for the next issue, to cover November 22–December 19, 1997, will be on **Friday, November 14.** Please send news to Lisa Cisneros at 476-3256 (cisnero@itsa.ucsf.edu) and calendar items to Nancy Heller at 476-8810 (nheller@itsa.ucsf. edu), all at Box 0462. Fax last-minute copy to 476-3541. For address and distribution changes, call C.J. Burleson at 476-6791.

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Researchers open new vistas in treating eye disorders

By JENNIFER O'BRIEN

At the forefront of vision correction and research, UCSF eye specialists presented the latest advances at a special news briefing held recently in conjunction with the annual meeting of the American Academy of Ophthalmology in San Francisco.

These advances include:

- providing mounting evidence that specific forms of biological stress stimulate activity of a gene they have implicated in the most common form of glaucoma. Researchers Jon R. Polansky, an associate professor of ophthalmology, and Thai D. Nguyen, an assistant professor of molecular biology and ophthalmology, also reported how they cloned the gene and that they are making progress in identifying molecules that might ultimately be used to deter the onset of the eye disease;
- achieving success with a new eximer laser that may allow for more treatment for more significant degrees of nearsightedness and astigmatism;
- growing human corneal endothelial cells in laboratory cultures with the ultimate goal of transplanting them into patients. Studies show that by employing the latest in cell culture and gene therapy technologies, researchers may be able to complement, even supplant, conventional corneal transplant therapy;
- getting promising results with corneal ring implantation, the first surgical technique for neatsightedness that does not involve removing eye tissue. UCSF is one of 10 sites in the US participating in the clinical trial.

Glaucoma gene

Earlier this year Polansky and Nguyen reported that the gene for the most common form of glaucoma was located in the same place on chromosome 1 as other investigators were studying for juvenile glaucoma. The finding opened up new vistas for diagnosis, management and possibly new therapies for many glaucoma sufferers.

Polansky and Nguyen determined that the gene, known as TIGR, is responsible for producing a protein that they previously reported appears in abnormal abundance in the eyes of patients with primary open angle glaucoma (POAG). Nguyen has now identified and mapped out the part of the gene that governs how much TIGR protein is produced.

The TIGR protein is found normally in a layer of eye cells called the trabecular meshwork, which plays a key role in regulating fluid pressure in the eye. This structure, just one-fiftieth of an inch in diameter, acts like a drain in a chamber called the aqueous humor, which permits nutrient-rich fluid to circulate through the eye between the lens and the cornea. Polansky and Nguyen theorize that the protein accumulates and, in a sense, clogs the drain, causing the buildup of eye pressure that is the main cause of optic nerve damage that results in partial or complete loss of eyesight in glaucoma.

"Our studies suggest that multiple hormonal and environmental stimuli can regulate TIGR protein production," says Polansky. "Recent developments suggest that new drug systems can be made using this approach."

Conventional glaucoma treatments treat the buildup of pressure on the eye's optic nerve by turning off the "faucet" that supplies fluid and nutrients to the aqueous humor. "Our research supports the idea that clearing and preventing clogging of the drain is also a promising strategy," Polansky says.

UCSF has filed a series of patent applications relating to the TIGR gene in connection with the diagnosis and treatment of glaucoma. The University of California has exclusively licensed patent rights for the development of diagnostic products to InSite Vision, Inc., of Alameda, Calif. Polansky was a founder of the company, and now he and Nguyen serve as consultants to help make use of the TIGR gene for glaucoma diagnosis and therapy.

Glaucoma affects one in every one hundred Americans, or about three million people, and blinds 12,000 of them each year. The disorder is actually a number of eye diseases that affect the optic nerve, which transmits visual stimuli from the eye's retina to the brain. Elevated eye pressure is the main cause of optic nerve damage. One of the frustrations of treating glaucoma is that its most common adult form, POAG, often has no obvious symptoms until major loss of peripheral vision has occurred. Early detection and new treatments are needed, says Polansky.

Laser eye surgery

Some of the 10 million Americans with substantial nearsightedness or astigmatism may soon have another alternative to eye glasses and contact lenses.

Until now, laser vision correction, also known as photorefractive keratectomy (PRK), has only been approved for treating low to moderate nearsightedness and astigmatism. But recent developments suggest that laser treatment for people with severe cases of these eye disorders may soon be available.

Of the 50 million Americans with nearsightedness — also known as myopia — approximately one in five fall into the range classified as severe. People with nearsightedness have blurred or distorted distant vision. Pronounced astigmatism, in which near and far vision is distorted or blurred, occurs in two-thirds of people with nearsightedness.

RESEARCH ROUNDUP

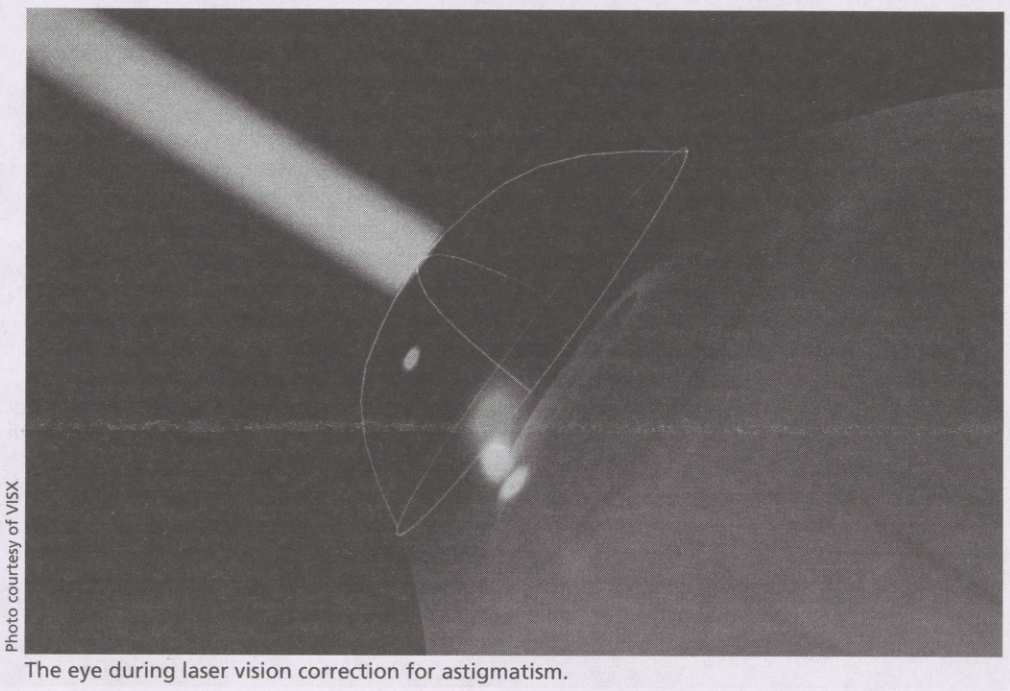


Photo courtesy of VISX

The eye during laser vision correction for astigmatism.

Preliminary results of a study evaluating a new excimer laser that may allow treatment for more significant degrees of nearsightedness and astigmatism are promising, according to David Hwang, UCSF associate professor of ophthalmology.

Hwang, principal investigator of an FDA clinical trial of the Nidek excimer laser, reported that, 91 percent of 148 patients with nearsightedness ranging from mild to severe achieved vision of 20/40 or better after being treated with the Nidek laser — good enough to pass a driver's test without corrective lenses. Glasses or contacts were still required in the remaining 9 percent of patients, but the amount of lens correction was substantially reduced as a result of the laser treatment.

"This finding suggests that the door may soon open for many people who couldn't previously be treated with laser therapy," says Hwang, co-director of the UCSF Vision Correction Center.

The Nidek laser, still being evaluated, differs from existing, FDA-approved excimer lasers such as the VISX laser, which currently is the only laser approved for treating low to moderate nearsightedness and astigmatism. Whereas the VISX laser utilizes a beam of fixed diameter and position, the Nidek laser scans across a wider surface of the cornea, producing a smoother sculpting of the cornea. This procedure can translate into improved accuracy, particularly in severely nearsighted cases.

The results of the VISX laser at UCSF for treating low to moderate nearsightedness and astigmatism have been excellent," says Hwang, "and the Nidek excimer laser promises an even greater level of accuracy in severe cases."

UCSF is the only center in California that has both the Nidek excimer laser and the VISX laser. Enrollment in the Nidek laser study is still ongoing.

FDA approval of the Nidek laser is at least 18 to 24 months away, Hwang estimates. Meanwhile, VISX, Inc., of Santa Clara, CA, earlier this month filed an application with the FDA seeking extension of the approved use of its laser to include more severe degrees of nearsightedness.

Photorefractive keratectomy involves reshaping the curvature of the cornea, the transparent window of the eye that covers the iris and the pupil and admits light into the eye's interior. A normal cornea is round, like a basketball, and focuses light rays directly onto the retina.

The excimer laser is used to remove microscopic amounts of tissue from the surface of the cornea, making the central zone flatter. The flattened cornea is thus able to focus light more directly on the retina, reducing astigmatism and nearsightedness. The laser system's computer-controlled technology calculates the exact amount of corneal tissue to be removed, which typically is less than a strand of human hair.

For more information or to attend a free information seminar, people should call 476-5021. Information is also available at http://itsa.ucsf.edu/~eye.

Cultivating cells

Faced with a number of obstacles to successful corneal transplants, such as an insufficient supply of donor tissue in some countries, researchers at UCSF, a major center for complex corneal transplantation, are pioneering an alternative form of transplant therapy by growing human corneal endothelial cells in laboratory cultures with the ultimate goal of transplanting them into patients.

Their studies show promise for complementing, perhaps even supplanting, the conventional corneal transplant procedure, according to Hwang. Employing the latest in cell culture and gene therapy technologies, the UCSF scientists are achieving results that, theoretically, could overcome all of the limitations of current corneal transplantation, he said. The team hopes to begin performing human cell transplantation within the next three to five years.

More than 42,000 corneal transplants are performed each year in the US — saving or restoring the vision of those struck by corneal disease. But the procedure is not a panacea for the disease because often donated corneal tissue is rejected by the eye. And while corneal transplant surgery is effective in treating end-stage disease, many patients could benefit from a therapy offered earlier on in the disease process that would prevent the degeneration of corneal cells that ultimately requires transplantation.

Corneal disease is characterized by blurred vision or blindness stemming from damage to the cornea. Unlike native corneal endothelium, which must be used within days of harvesting, cultured corneal endothelium can be frozen and thawed when desired for later use. Potentially, cultured cells from a single person could provide enough cells for hundreds of recipients, Hwang says. There also is the possibility that cells from a small biopsy of a patient's healthy corneal tissue could be cloned and later transplanted back to the patient without the risk of rejection, he added.

The researchers have succeeded in transplanting human corneal cells into animals' eyes. This early research paves the way for circumventing the problem of tissue availability in many parts of the world.

The UCSF researchers have also found that cultured human corneal endothelial cells can be pharmacologically treated or genetically modified to make them less prone to rejection, which reduces the need for long-term administration of anti-rejection medications. One in five American adults who undergoes corneal transplantation experiences tissue rejection, and in children the odds increase to 50 percent or higher.

The UCSF scientists are also exploring the use of gene therapy to treat corneal endothelial cells before the occurrence of end-stage disease. The work being carried out in Hwang's lab builds on that of UCSF researchers in the 1970s, who successfully transplanted corneal endothelial cells from cow eyes into the eyes of rabbits and cats.

Corneal rings

Preliminary results of a new surgical procedure, called "corneal ring implantation," to correct nearsightedness, are promising, according to Richard Abbott, a UCSF professor of ophthalmology, who is principal investigator of an FDA-approved national trial.

In corneal ring implantation, a tiny plastic ring is surgically inserted into the periphery of the cornea, the delicate eye tissue that covers the iris and pupil. The cornea is the window through which light is transmitted and focused on the retina.

In nearsighted people, the tissue has an unusually steep curvature, which forces light rays to focus in front of the retina, instead of directly on it, as it should. The corneal ring is intended to flatten, or correct, the curvature.

Smaller and lighter than hard contact lenses, the corneal ring is made of the same medical plastic that has been safely used for more than 40 years in cataract patients.

The surgery is performed under a topical anesthetic and is usually completed in under half an hour as an outpatient procedure. Visual improvement usually begins within a day after surgery, Abbott adds. In early results of patients who had mild to moderate cases of nearsightedness, 97 percent of 113 patients had improved vision of at least 20/40, the threshold for driving a car without glasses. Nearly half had better than 20/20 vision.

"These results show equal to, or superior, outcomes to those achieved with laser-correction procedures," says Abbott, co-director of the UCSF Vision Correction Center.

Significantly, the procedure is the first surgical technique for nearsightedness that does not involve removing eye tissue, says Abbott. While the ring is designed to remain permanently in the eye without maintenance, it can be removed by a surgeon. "This allows people to go back to glasses or contacts," he says. "Theoretically, it could allow a surgeon to replace the rings as the patient's eyesight changes with age, or to take advantage of future advances in vision correction."

The UCSF department of ophthalmology is one of 10 sites in US —and the only one in Northern California — participating in the clinical trial. The ring procedure has already received regulatory approval for the 15 European Union Nations.

PLANNING FOR THE NEXT M

MACHADO AND SILVETTI ASSOCIATES TO DESIGN MASTER PLAN FOR MISSION BAY

By LISA CISNEROS

Culminating a five-moth competitive design process involving entries from around the world, a 10-member panel has selected the team lead by Machado and Silvetti Associates Inc. to prepare the master plan for UCSF's next campus at Mission Bay.

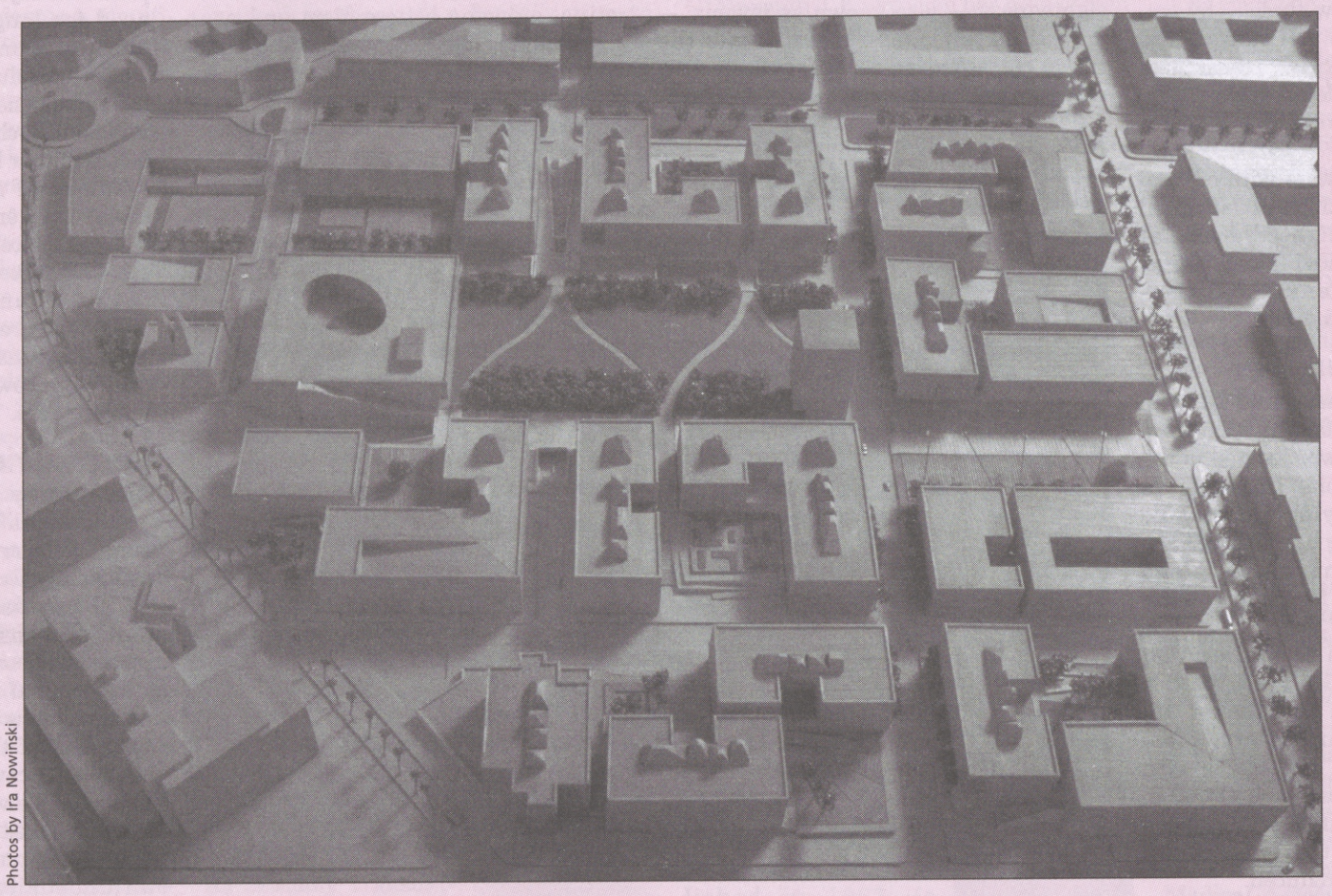
An internationally recognized planning and design firm known for creating distinctive urban spaces and unique works of architecture in the US and abroad, Machado and Silvetti Associates was one of five finalists to submit proposals for the 43-acre site donated to the University by Catellus Corp. and the city.

UC Regents are expected to review the plan at their next meeting.

On Nov. 1, the five firms formally submitted their plans to a jury of architects and scientists, including Keith Yamamoto, UCSF professor and chair, department of cellular and molecular pharmacology, who led the Mission Bay Task Force. The panel chose the team of Machado and Silvetti last week to help guide the development of 2.65 million square feet of research laboratories, libraries, classrooms and lecture halls and support space.

Construction of the first three buildings on 16th Street near Sixth and Owens streets is scheduled to begin next year. Development of the entire $800 million project will be phased over the next 15 to 20 years.

"This is early in a long process," Yamamoto says. "Over the next few months, we will be deciding upon who will be the first occupants and we will work in detail with the architects to design what the inside will look like."



Photos by Ira Nowinski

FACULTY TO GIVE INPUT

Faculty are expected to discuss the project at an Academic Senate meeting on Monday, Nov. 10, and will consider the faculty proposal, "Biomedical Research and Training Programs at UCSF Mission Bay and UCSF Parnassus Heights." The meeting, to be held from 3 to 5 p.m. in Cole Hall, will feature speakers including Yamamoto, who will discuss the proposal; Steve Barclay, vice chancellor of administration, who will provide information on the financial issues surrounding the creation of the second campus; and Robin Jones of University Advancement and Planning, who will present the preliminary design plan. Representatives from Academic Senate committees will discuss mechanisms for monitoring the ongoing development of the Mission Bay site and its impact on the teaching and research programs.

"There already has been substantial faculty input in this process and faculty will have ongoing input in helping to identify our priorities for Mission Bay in a way that we can optimize our science," Yamamoto says.

Faculty, staff, students and the public had two weeks to offer their opinions on each of the designs submitted by the five finalists last month. Plans and models were on display at the American Institute of Architects and the San Francisco Museum of Modern Art as well as at UCSF, which held an open forum to discuss the project and critique the plans.

Jones, director of campus planning, said developing the Mission Bay project is just one part of a long-range capital improvement program that includes reinvesting to upgrade exisiting facilities.

The University saved some $40 to $80 million with the transfer of the property, which is expected to become a hub for biomedical technology. Private research and development ventures, some 6,000 residential units, including 1,500 earmarked for lower-income families, a public school and a light rail system are all planned for the adjacent neighborhood.

"We are thrilled to be able to submit Machado and Silvetti to the University of California Regents for one of the most exciting planning and architectural commissions to occur in San Francisco in decades," said Clifford Graves, president of the Bay Area Life Sciences Alliance (BALSA), which sponsored the design competition. "San Francisco's dream for establishing a cutting-ege biotech education and research facility that also has adjacent land available for life sciences companies — so their close proximity will allow them to reap the benefits of collaborating with UCSF as well as each other — is becoming a reality."

A San Francisco-based, privately-funded, nonprofit corporation, BALSA was formed by business leaders to support UCSF's expansion plans in the city and to promote life sciences and biotechnology development to spur scientific discovery, economic development and employment opportunities.

"This campus is extremely grateful to BALSA for sponsoring this master plan," says Vice Chancellor Bruce Spaulding. "We have received close to $1 million's worth of expertise and valuable design concepts at no expense to the campus or the state."

Based in Boston, Machado and Silvetti, which is associated with Gordon H. Chong & Partners, Olin Partnership, Research Facilities Design and Ove Arup Partners, will be commissioned by BALSA to prepare the detailed master plan required to guide growth of the site.

Jones, who served as a consultant to the jury panel along with other technical advisors who evaluated each design against a set of University guidelines, says it was important that the architectural plans be flexible enough to withstand the test of time since the phased development of the project largely depends on state and donor financing.

Flexibility was equally important to Machado and Silvetti Associates, according to their narrative description submitted to the panel. "We believe that maintaining the San Francisco street grid most efficiently integrates the campus with the fabric of the city, while providing flexibility for future growth. In addition, strong modifications to this grid in plan and section enable us to produce a distinct sense of place and identity for the campus, while creating attractive vistas."

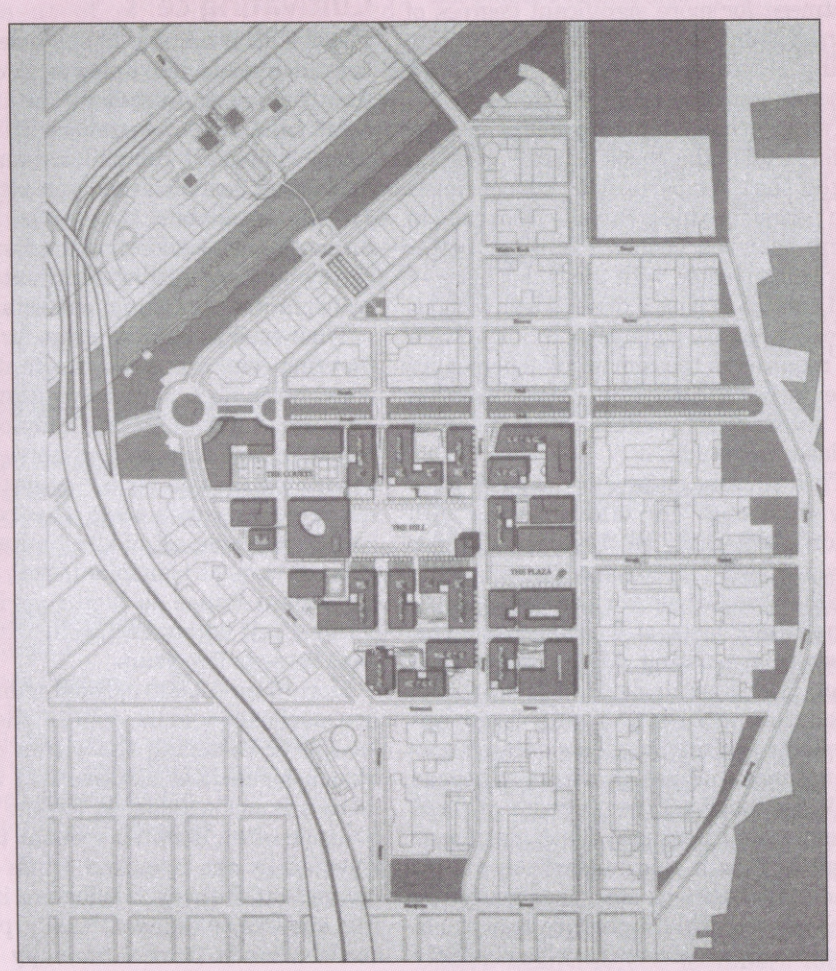
The firm's proposal for Mission Bay does not espouse any single architectural style, but strives to find that which is unique and important within a given project, and to express that architecturally. In this case, the focal point is a grassy hill designed to complement the local landscape while giving onlookers a view of the city skyline.

For more information about the Mission Bay campus, including the proposal submitted by the Mission Bay Task Force, please visit UCSF's online daily, Daybreak at www.ucsf.edu/daybreak/

— BALSA contributed to this report

DESIGN BY

MACHADO AND SILVETTI ASSOCIATES, INC.



MISSION BAY/ PARNASSUS STATISTICS

	MB	Parn.
Total space:	43 acres	33 acres
Open space:	8 acres*	0.6 acres
Square footage	2.6 million	3 million
Employees:	9,000*	15,000
Parking spaces:	2,700	5,300

* Estimates

T MILLENNIUM

PLANS FOR CREATING AN URBAN CAMPUS

PUBLIC/OPEN SPACES

To create a campus that enhances human interaction and community, Machado and Silvetti Associates propose three different scales of public spaces, linked together by pedestrian routes. The firm identifies and describes these three major open spaces as follows:

- THE PLAZA: This paved urban space with commercial activities is defined at its edges by an arcade and a line of plane trees. It is the preferred arrival point from public transportation and the proposed bicycle lanes along Third Street.
- THE HILL: This green, sloping lawn constitutes the heart of the campus. It rises from Fourth Street towards the public level of the Campus Center and is edged by the Steps to the south and the Terraces to the north. The iconic Administration Tower (12-stories tall) punctuates the Hill's southeast corner. This inclined plane allows the architects to produce a topography found throughout San Francisco's parks, while enhancing vistas in a manner similar to many city streets. Furthermore, the Hill produces urban moments that are found elsewhere in San Francisco; for example, the entrances to the garage below the green are reminiscent of streets tunneling under hills in the city. A significant amount of parking is located below the Hill; as a result, the campus is not overwhelmed with structured parking in buildings that line the streets. Also, the Hill allows for discrete servicing of the central buildings on campus, masked from public view.
- THE COURTS: This space contains athletic courts that help to foster interaction among the campus, the high school (located in the northwest corner of the property) and the surrounding community.
- OTHER AREAS: Machado and Silvetti Associates also propose including garden-like spaces to maximize public interaction between a pair or trio of buildings. These quadrangles of outdoor space contain diverse garden types, ranging from a grove of trees to a fountain, an Asian garden to an herbal landscape, etc.

The firm's plan also calls for semi-public spaces in every laboratory building to include at least one terrace, court, or outdoor room carved from its overall mass and surrounded by offices, lounges, and academic community spaces. The image of each space is varied, where some will be glazed, others open, some shaded by trellises, others capped by floors above, etc.

MASS

Machado and Silvetti Associates have taken a very pragmatic approach to building sizes and configurations. This allows the architects to plan for yet-unprogrammed growth, because the interior spaces are kept generic and flexible. These massings are developed to form a variety of well-shaped streets. One example is Fourth Street, developed as a "shopping" street lined with campus-oriented commercial activities.

SUSTAINABILITY

The master plan encourages the development of sustainable buildings by providing a porous built fabric, sensible massings, abundant landscaping, and incorporating energy conservation techniques. All laboratories are organized to take advantage of natural lighting, while offices use natural ventilation through operable windows.

PHASING

The intention of phasing is to have a sense of a full campus at all times. This is achieved through a healthy programmatic mix and the presence of public space throughout all phases of the project.

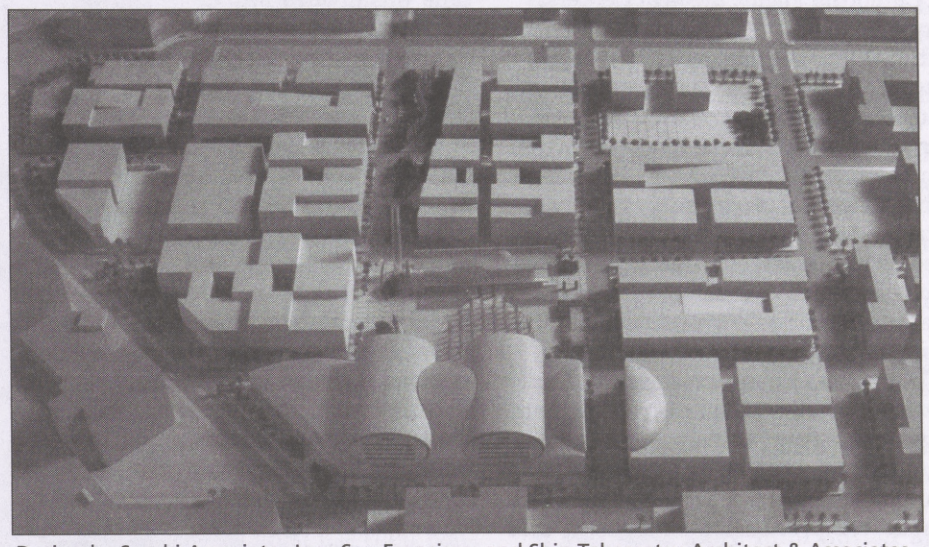
DESIGN GUIDELINES

Machado and Silvetti Associates firmly held the position that good and appropriate architectural design guidelines can only be established by first designing a specific architectural proposal, and then abstracting more general guidelines from this work. For the purposes of this master plan, guidelines are proposed at a very specific level for public spaces and a more general level for architectural design, where the perspectives begin to establish a unified sense of place and insinuate an image for the campus.

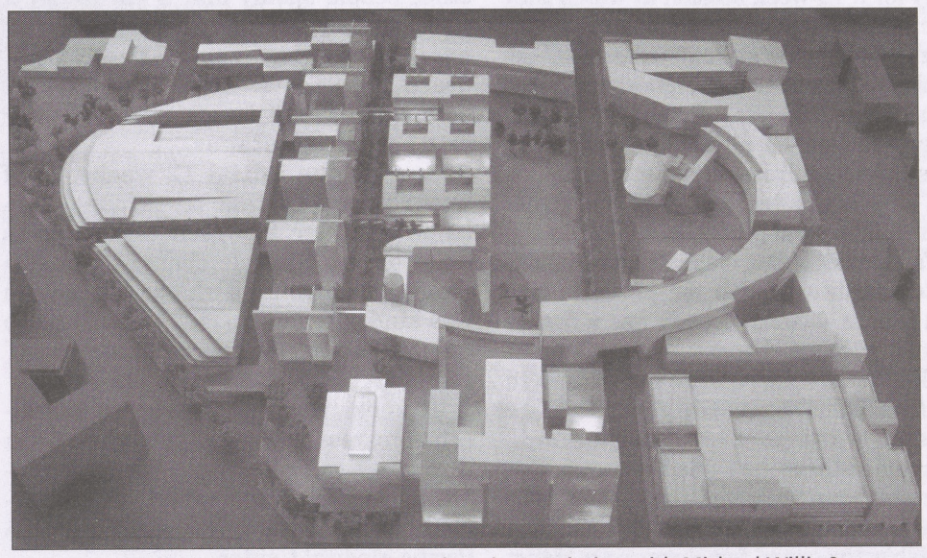
IMAGE

The image of the buildings should relate to the city of San Francisco (whose distinctiveness the architects wish to enhance) and to the UCSF institution (conveying its prestige and representing the future-looking research being conducted on the Mission Bay campus). Machado and Silvetti Associates believe this can be achieved by working with intensely colored building volumes (like those of San Francisco, expressed in materials such as cast stone, masonry and wood) as well as by encouraging technologically inventive detailing (to represent the innovative nature of scientific activity) and a sense of visual transparency (to make the workings of the institution understandable and visually accessible to the public).

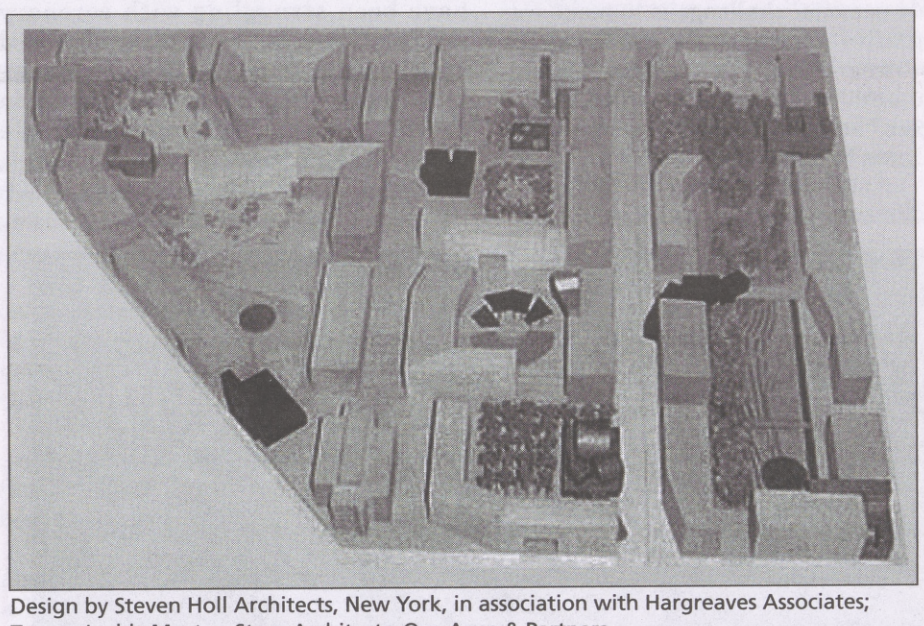
VISIONS FROM THE OTHER FOUR FINALISTS



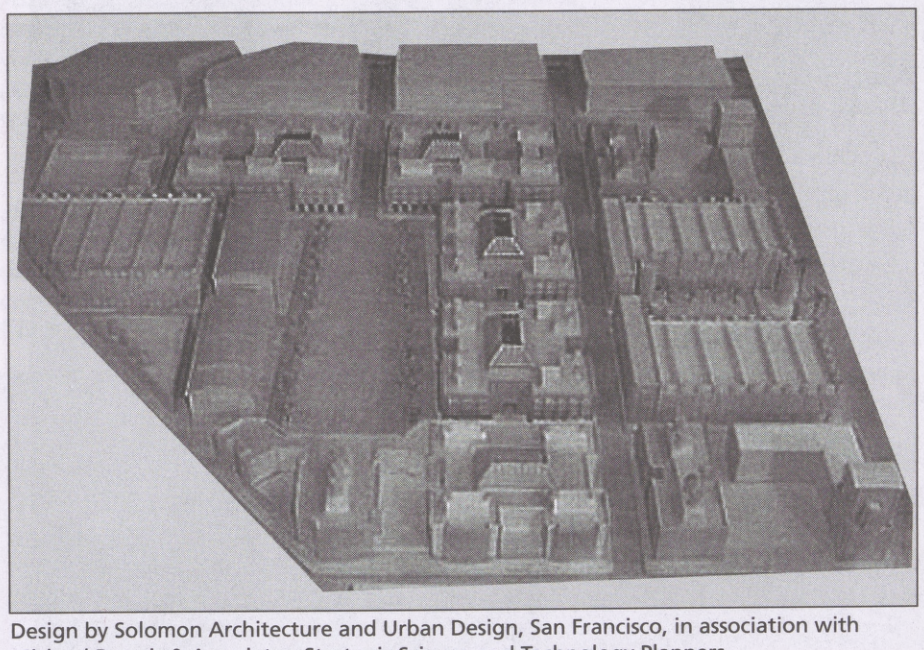
Design by Sasaki Associates Inc., San Francisco, and Shin Takamatsu Architect & Associates, Tokyo, in association with McLellan & Copenhagen Inc.; Ove Arup & Partners



Design by STUDIOS Architecture, San Francisco, in association with Michael Willis & Associates; SWA Group; Earl Walls Associates; Ove Arup & Partners



Design by Steven Holl Architects, New York, in association with Hargreaves Associates; Tanner Leddy Maytun Stacy Architects; Ove Arup & Partners



Design by Solomon Architecture and Urban Design, San Francisco, in association with Michael Dennis & Associates; Strategic Science and Technology Planners

The four firms which lost their bid to design the Mission Bay master plan will be encouraged to submit plans for individual buildings on the campus, University officials say.

Program reverses heart disease without drugs, surgery

By DALE MARTIN

Heart-disease patients committed to improving their health are finding a new reason for hope at the Heart Disease Reversal Program now offered as a collaborative project by UCSF and California Pacific Medical Centers.

Located at UCSF/Mount Zion Medical Center, the new program combines moderate exercise, stress management, nutritional guidance and group support to offer patients a healthier lifestyle that can reverse heart disease.

The pioneering program — the only one of its kind in Northern California — is based on the work of UCSF clinical professor of medicine Dean Ornish and his colleagues at the Preventive Medicine Research Institute in Sausalito.

"This is the only program scientifically proven to reverse heart disease without drugs or surgery," Ornish says. "It provides many people with a scientifically grounded way of empowering themselves to make comprehensive changes in diet and lifestyle."

Participants in the program meet initially for a 12-week session in which they receive more than 100 hours of care, heart-disease education, stress management, and heart-healthy gourmet meals with nutritional education. The team of experts includes a physician, an exercise physiologist, nurses, a registered dietitian, a specially trained chef and stress management and group leaders.

It's intensive, but it may be the key to better cardiac health for patients like Dan Marks — who already has a family history of heart disease. An investment banker from Oakville, Marks, 55, had his first heart attack 11 years ago. He doesn't want to face another one. Although Marks has tried a number of practices over the years from exercise to yoga, it wasn't until he read "Dr. Dean Ornish's Program for Reversing Heart Disease," that he found something to put it all together.

"My personal challenge is to make this integrative plan work for me. I want to keep stress down, diet, maintain meditation and be involved in the group process," he says. "I think this is the path to a more balanced life."

Over the initial 12-week program, Marks attended a five-hour session twice a week at UCSF/Mount Zion. His time was divided into exercise, stress management, a group support meeting with other participants, and a gourmet dinner with a nutrition lecture and cooking demonstration. It's a time commitment, but Marks reasoned, "I had to become a priority."

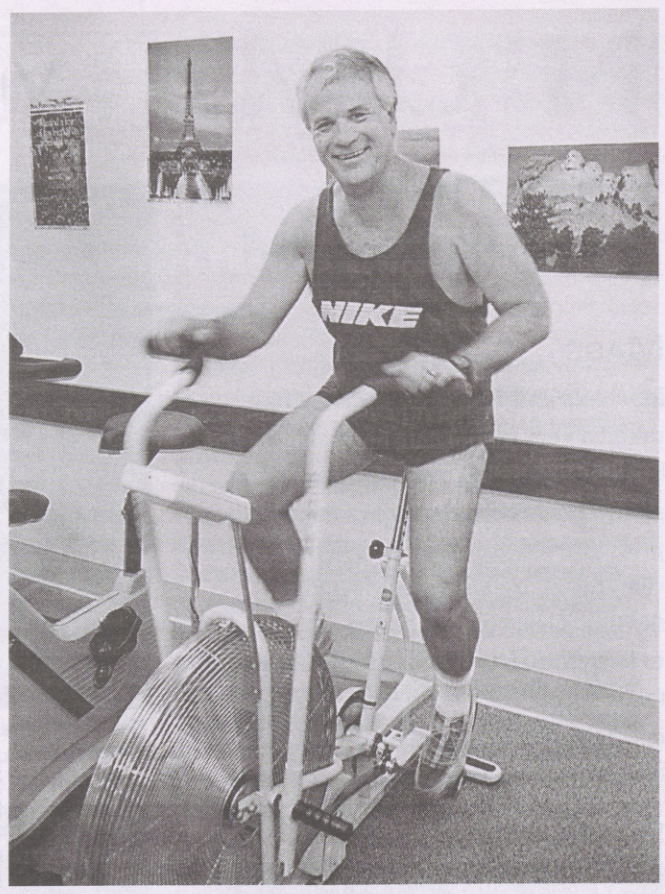
Marks is in good company. The diverse group included men and women of difference ages and health backgrounds. Participants have quickly learned to come together for support — an added benefit for Marks.

"The idea of talking to other people openly and sharing your feelings is part of opening your heart," Marks says.

The program is offered in three stages. Following the initial 12 weeks, staff may recommend that participants continue to Stage 2, which continues to build on the lifestyle changes made in Stage 1. Participants who do not require this kind of follow-up may be referred to the program's "self-directed community," a support network for graduates.

"It is gratifying to watch the significant progress that participants make in this program," says Anne Thorson, program medical director who is also a cardiologist in private practice at California Pacific Medical Center.

"By participating in the Heart Disease Reversal Program, men and women who have been struggling with coronary artery disease can experience improved health, and a dramatically different approach to healthy living that's rooted in the program's substantial lifestyle changes," she says.



Chris T. Anderson

Dan Marks exercises to reduce heart disease.

"It is equally gratifying to participate in this visionary collaborative project between two institutions — CPMC and UCSF — that are committed to excellence in innovative patient care," Thorson adds.

The program is designed for patients who have ischemic coronary artery disease and are considering surgery; patients who have previously had surgery; or patients who are at high risk for coronary artery disease. All patients referred to the program remain under the care of their referring physician. For more information on the program, contact Kevin Worth, program manager at 353-4278.

Tom Wachs

The softer side of social work

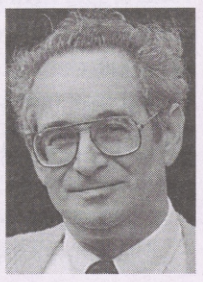
Stephanie Berman, a clinical social worker, plays with 8-month-old Alexi Blum, who was born a couple of months premature at UCSF. Children who once had life-saving medical care either at UCSF's Intensive Care Nursery or the Fetal Treatment Center were special guests last week at a Halloween reunion party in Saunders Court. The Intensive Care Nursery cares for about 850 high-risk newborns each year while the Fetal Treatment Center receives more than 200 referrals a year from all over the country when a fetus has been diagnosed with serious problems.

Smoke-free bars see no impact on sales

By JEFFREY NORRIS

With the January 1 date that California bars become smoke-free looming ever nearer, Stan Glantz, UCSF's prominent tobacco researcher has published a new study that concludes that such rules do not keep bartenders from ringing cash-register bells.

In fact, local ordinances that make bars smoke-free appear to have no impact on business, according to a report by Glantz, a professor of medicine in the division of cardiology and a member of the Institute for Health Policy Studies at UCSF, and research associate Lisa R.A. Smith. Their study, which appeared in the October issue of the American Journal of Public Health, was financed by The National Cancer Institute.



Glantz

"Food service workers enjoy less protection from secondhand tobacco smoke than any other group of employees," says Glantz. "Legislators and government officials can enact health and safety regulations to protect patrons and employees in restaurants in bars from the toxins in secondhand tobacco smoke without fear of adverse economic consequences."

To study economic impacts of no-smoking ordinances on bars, Glantz and Smith examined the first seven California locations with smoke-free-bar ordinances — the communities of Anderson, Davis, Redding, San Luis Obispo, and Tiburon, as well as Santa Clara and Shasta Counties — and compared them to areas without ordinances, matched for population, income, smoking prevalence and geography.

To gauge bar sales, Glantz and Smith used sales-tax data obtained from the Research and Statistics Division of the California Board of Equalization for 1991 through 1995.

As part of the study, Glantz and Smith also updated their earlier investigation of the impact of smoke-free-restaurant ordinances by analyzing an additional three years worth of sales-tax data. As in their earlier study of smoke-free-restaurant ordinances, they once again found no impact on sales.

Glantz and Smith's earlier restaurant study has been attacked vociferously by the National Smokers Alliance, a tobacco-industry-funded group, which publicized a critique prepared by Michael Evans, an economist. The Evans critique also formed the basis of a lawsuit filed against the University of California by an apparently related group, Californians for Scientific Integrity. The critique has never appeared in a peer-reviewed journal.

Evans pointed out only a single error of potential significance. In the earlier restaurant study, published in the American Journal of Public Health in 1994, there were errors in the effective dates of some of the 100-percent smoke-free provisions of some ordinances. However, when Glantz and Smith corrected the dates and reexamined the data, their conclusion that there was no adverse economic impact remained unchanged.

The editor and reviewers for the American Journal of Public Health re-reviewed the earlier Glantz and Smith study as well as the current study, considering the points raised by Evans.

In a scathing editorial about Evans' review, Journal editor Mervyn Susser writes, "Instead of a compelling critique, however, we find a melange of scientifically inadmissible manipulations of data to obtain a desired result."

"Even if the Evans critique can pass in the field of economics for legitimate science — something I do not credit — it cannot pass in this Journal," Susser adds.

"We are not the only ones to conclude that smoke-free ordinances have had no negative economic impact on restaurant business," Glantz says. "Several other studies that confirm our earlier results have been published since 1994. Now we know that the same is true for bars."

Prop 209 (from page 1)

the heels of a Nov. 1 report by the American Association of Medical Colleges (AAMC) showing that underrepresented minorities in states affected by restrictions on affirmative action are turning away from careers in medicine.

The number of underrepresented minorities applying to medical school who reside in states affected by restrictions such as Proposition 209 — California, Texas, Louisiana, and Mississippi — declined 17 percent in 1997 over the previous year. In contrast, the number of underrepresented minorities applying to medical school from outside the affected states declined by 7 percent. Overall, due to the implementation of these new policies, 125 fewer minorities in the affected states pursued medical training in 1997, according to the AAMC.

The AAMC data also demonstrate that the number of minorities residing in these four states who were accepted to their medical schools dropped 27 percent this year, and the number of underrepresented minorities in these states who decided to enroll in their medical schools dropped 26 percent. In other states, however, the number of matriculating underrepresented minorities dropped approximately four percent.

"It is clear from our tracking data that the climate engendered by the Hopwood decision and Prop. 209 is discouraging minorities from applying to medical school," said AAMC president Jordan J. Cohen. "We find it particularly alarming that a large percentage of underrepresented minorities are not just avoiding medical schools in California, Texas, Mississippi, and Louisiana, but choosing not to pursue careers in medicine at all."

For the first time since 1988, the national applicant pool as a whole declined as well, with the number of people competing for the 16,000-plus medical school slots dropping by 8.4 percent to 43,020. The decrease follows four years of increasing applicant rates.

Photos by Chris T. Anderson

Photos by Chris T. Anderson

Halloween happenings

Dressed as sunshine, Cassandra Laine, daughter of Romuald Laine, a postdoc in the School of Pharmacy, came in second place in the costume contest at the annual Halloween festival on Parnassus. Veronica Craik, 2, who donned a dalmation costume on Halloween, shares a moment with her mom, Nancy Sambol, associate clinical professor of pharmaceutical sciences. Veronica's dad is Charles Craik, associate professor of pharmaceutical chemistry.

Open enrollment continues through Nov. 21

By now you've probably had time to look over the changes in UC-sponsored medical, dental, vision and other welfare plans spelled out in the open enrollment packet mailed to all UCSF employees last month.

If you did not receive the mailing from UC Benefits Plan Administration, call the UCSF Benefits Office at 476-1400. UCSF Stanford Health care employees are not eligible to participate in this open enrollment period.

Open enrollment, which continues through midnight Friday, Nov. 21, is the annual opportunity for employees to make changes to various plans, such as enrolling an eligible family member, transferring from one plan to another and canceling participation. All changes will become effective the first of the new year.

In most instances, employees must make changes to their coverage by calling the open enrollment action phone line using a touch-tone phone at 1-800-639-3779. Employees must use their benefits personal identification number, which is displayed on the personalized statement included in the open enrollment packet. The action line is available 24 hours a day, seven days a week. It's best not to wait until the last minute to call since the lines may be busy during the final few days.

Employees are encouraged to attend the provider meeting on Monday, Nov. 17, from 10 a.m. to 1:30 p.m., in the Millberry Union Conference Center.

Here's a summary of what's new for 1998:

- UC is expanding its eligibility verification process so that employees who add a family member to their coverage this year will be requested in January to provide documentation (marriage and birth certificates or adoption papers) verifying eligibility for all enrolled family members.
- UC has modified the group insurance regulations to include eligibility for grandchildren and stepchildren under age 23. They must be unmarried, living with you, supported and claimed as a tax dependent by you or your spouse.
- FHP Health Care is merging with PacifiCare. Members who do not elect another coverage will automatically be enrolled in PacifiCare on Jan. 1.
- While UC pays the entire premium for this coverage, dental plan service has been pared down — from two oral examinations to one and from three teeth cleanings to two per calendar year.
- UC Care now will cost employees almost double what they paid in premiums in 1997 and prescription co-payments will increase in 1998.
- PacifiCare, Kaiser and the Core Major Medical Plan will not cost employees a premium cost, but next year the monthly cost for Health Net is $1.60 for singles, $3.50 for two-party coverage and $5.07 for families.

If you need more information about providers, call the plan directly:

Core	1-800-632-0524
Health Net	1-800-640-2004
Kaiser	1-800-464-4000
PacifiCare	1-800-982-9993
Prudential High Option	1-800-632-0524
UC Care	1-800-313-3804
Delta Dental	1-800-777-5854
PMI	1-800-422-4234
Vision Service Plan	1-800-877-7195

Vitamin D (from page 1)

lack of the enzyme due to such conditions as kidney disease is common. In kidney disease, the enzyme stops functioning early in the breakdown of kidney function, requiring patients to be treated with a synthetic form of the vitamin D hormone.

People over the age of 65 are also susceptible to a breakdown in the vitamin D system, in their case due to a loss of the cellular receptors needed to engage the active hormone. These receptors, found in the nuclei of cells, serve as docking sites for hormones, allowing them to bind to specific gene sequences to turn genes on and off.

The complex process leading to the synthesis of vitamin D hormone begins with the vitamin D molecule being obtained by the body through the diet, as from milk, and through synthesis in the skin by exposure to sunlight.

But the molecule at this stage of the game is inactive, and thus does a person no good. Young bones won't grow normally, teeth won't be healthy, and old bones will deteriorate.

To be activated, the molecule has to go through a series of reactions orchestrated by enzymes, first in the liver and then in the kidney. Vitamin D is converted in the liver to 25-hydroxyvitamin D, which is then converted in the kidney to 1,25-dihydroxyvitamin D, the active hormone. The conversion in the kidney is performed by the 1 alpha hydroxylase enzyme.

The 1,25-dihydroxyvitamin D then acts like a classic hormone, coursing through the blood stream to various sites, where it regulates absorption of calcium by the intestine and deposition of calcium into bone.

The UCSF researchers first tried to isolate the enzyme's gene from the kidney. But the organ contains so little of the molecule that they were unsuccessful.

They then turned to human skin cells, which they knew contained the critical enzyme. UCSF researcher Dan Bickle, a professor of medicine and a collaborator in the study, had determined that 10 years ago. They also knew that the skin produced the active hormone. What wasn't clear, however, was whether the enzyme cloned from the skin would be encoded by the same gene as that active in the kidney. Nor was it clear what role the hormone in the skin plays.

"We know the vitamin D hormone in circulation comes from the kidney," says Miller. "But we don't think that the skin hormone gets into circulation. It has a role within the skin, but that role isn't clear."

Thus, once they had cloned the gene in skin cells, the researchers set out to confirm that it was the same gene as that found in the kidney. They did so by introducing the cloned gene into cells that normally wouldn't contain the enzyme. In so doing, they determined that the cells did, in fact, make the vitamin D hormone normally synthesized in the kidney.

The researchers then turned to a patient with hereditary vitamin D-dependent rickets to seek confirmation of their finding. They first determined that the skin from the patient lacked the enzyme activity. They then isolated the gene for the enzyme in the patient and identified the mutation.

Finally, they determined that the 1 alpha hydroxylase gene was located on the same chromosome, chromosome 12, as in patients with hereditary vitamin D-dependent rickets.

"Nature has done the experiment for us," says Miller, referring to the method of creating a mouse model in which a gene has been removed in order to show the impact its absence has on the body.

And the finding should provide a new angle for exploring perhaps the most fundamental component of the human body: bone.

"There is so much we don't understand about the skeleton," reflects Miller. "And a lot happens right in the cell, right at the bone cell. The skeleton is an understudied organ. It's not just girders with interesting stuff draped on it. It's a living tissue with biology, endocrinology, and genetics all its own, and it has interactions with every other body system."

China (from page 1)

girls' feet were bound so tightly and early in life that they were unable to dance and had difficulty walking.

By the time a girl turned three, all her toes but the big toe were broken, and her feet were bound tightly with cloth strips to keep her feet from growing larger than 10 cm., about 3.9 inches. The practice would cause the soles of feet to bend in extreme concavity.

Foot binding ceased in the 20th century with the end of imperial dynasties and increasing influence of western fashion, according to the UCSF study. "As the practice waned, some girls' feet were released after initial binding, leaving less severe deformities," Cummings says. "However, the deformities of foot binding linger on as a common cause of disability in elderly Chinese women."

A woman's current size 5½ shoe looks large compared to the shoes worn a century ago by Chinese women with bound feet.

Power plant testing to stimulate senses

As construction of the new Central Utilities Power Plant enters its final phases, facilities managers say those on Parnassus can expect to experience the sights, sounds and smells of the testing period through November.

The contractor has embarked upon a period of intensive testing of the cogeneration plant, which will produce a maximum capacity of 13 megawatts of electricity and 90,000 pounds of steam per hour for the Parnassus campus. Construction work is expected to be completed by late November, according to Laura McCarty, project manager.

"You may have noticed intermittent sounds, odors, plumes of steam or smoke emanating from the new plant," she says. "Most of these are temporary and not indicative of the final operating characteristics. Although we are taking every effort to minimize the inconveniences, some are inevitable. "

Some of the recent inconveniences have been due to a number of frustrating electrical outages and shutdowns.

"Failure of PG&E distribution systems has been the primary cause," McCarty says. "We did, however, have two emergency outages related to equipment failures in the new plant."

But McCarty notes that the utilities team is doing everything it can to prevent future unplanned outages.

The utilities team, in conjunction with expert electrical consultants and building managers, is carefully planning the transfer of power from the old plant to the new (called tie-ins). The tie-ins will not occur until the new plant has fully demonstrated its reliability and back-up power is in place. Once this process is complete, the new plant will be much quieter and cleaner burning.

"We are currently working with the contractor in detail to ensure that this process goes smoothly," says McCarty, who asks for the campus' continued cooperation through this most critical phase of the project.

After the new plant is up and running, the old power plant, which dates back more than 40 years, will be demolished. "It's reached the end of its useful life," McCarty says. "As the campus has grown, we have much greater energy needs."

For more information, call the project hotline at 502-7287.

Nov. 7–21, 1997

7 Friday

MOBILE MAMMOGRAPHY VAN: The UCSF van offers convenient breast cancer screening, 9 a.m.-3 p.m., Lakeshore Plaza, 1569 Sloat Blvd. The exam costs $75 and takes about 20 minutes. Written or verbal approval from a doctor is required. Call 476-2193 for an appointment and for other dates and locations.

WELLNESS LECTURE: Effie Chow presents *Chinese Medicine: Introduction to Qi Gong,* noon, HSW 300. Learn about this principal method of treatment within traditional Chinese medicine. Sponsored by the Institute of Healing Arts & Sciences and Millberry Fitness Center. Free. Call 584-4416.

ALZHEIMER'S FORUM: The UCSF-Fresno Alzheimer's Disease Center presents a two-day forum entitled *Dementia and Hospice: Shared Issues, Comprehensive Management,* Doubletree Hotel, 1055 Van Ness Ave., Fresno. Call 209/225-6100, ext. 5419.

10 Monday

MERGER SUPPORT GROUP: The Faculty Staff Assistance Program and the Human Resources transition team present an informal drop-in support group for employees affected by the UCSF/Stanford Health Care merger, 11:30 a.m.-1 p.m., MCB Room 131. Group facilitator is Lois Goodwill. Employees are welcome to drop in for a brief visit on any Tuesday. Call 520-2407.

FACULTY DISCUSS MISSION BAY: Faculty to discuss the UCSF Mission Bay site and the proposal, "Biomedical Research and Training Programs at UCSF Mission Bay and UCSF Parnassus Heights," 3-5 p.m., Cole Hall. Speakers will include: Keith Yamamoto, chair of the Mission Bay Task Force, who will discuss the proposal. (See pages 4 and 5 for story.)

12 Wednesday

LIBRARY WORKSHOP: The library's multimedia development lab offers a workshop for faculty members only, 9 a.m.-12 p.m., S 165. The workshop is an introduction to technology in education and putting teaching materials on the Web. Cost is $20. Call 476-3766.

BLOOD DRIVE: Donate blood between 10 a.m. and 4 p.m., Mission Center building Conference Room. Snacks will be provided by Just Desserts. Please stop by at your convenience. Call 476-6989.

BROWN BAG LECTURE: Jeffrey Norton, professor of surgery and chief, surgery at SF VA Medical Center, presents *VAMC: From Laboratory to Bedside,* 12:10 p.m., HSW 300. Find out about the innovative new programs in scientific research, surgery and patient care. Free. Sponsored by Public Services Programs. Call 476-4394.

LECTURE ON YAWNING: Francis Schiller, department of history of health sciences, presents *Yawning? Fact and History,* 8 p.m., S 214. Sponsored by the Bay Area History of Medicine Club. Call 753-8483.

13 Thursday

BENEFITS MEETING: The Benefits & Financial Planning office offers a chance to hear about UC-sponsored insurance plans, noon-1:15 p.m., VAMC auditorium.

RETIREMENT PLANNING: The Benefits & Financial Planning office presents a retirement system meeting for the campus community, noon-1 p.m., N 729. Learn about the features of the UC Retirement Plan (UCRP) and Defined Contribution Plan (DCP) and how they work. Call 476-1414.

LIBRARY WORKSHOP: The library's multimedia development lab offers a workshop for faculty members only, 4-7 p.m., CL 222. The workshop is an introduction to technology in education and creating effective presentations with MS Powerpoint. Cost is $10. Call 476-3766.

ARTS & PERFORMANCES: *Air Force One,* rated R, 5:45 and 8:45 p.m., Cole Hall Cinema. Admission $2-3.50. Call 476-6932 or check the website at http://artsperf.ucsf.edu.

14 Friday

NEWSBREAK MEDSOUNDS DEADLINE FOR NEXT ISSUE

WELLNESS LECTURE: Harriet Beinfield, presents Chinese Medicine: Concepts and Therapies, noon, HSW 300. Learn about the ways in which Chinese medicine views human life, health, and illness, including integration of acupuncture and herbal medicine with conventional care. Sponsored by the Institute of Healing Arts & Sciences and Millberry Fitness Center. Free. Call 584-4416.

MAURICE GALANTE LECTURE: Christine Cassel, chair, The Henry I. Schwartz Department of Geriatrics and Adult Development, and professor, geriatrics and internal medicine, Mount Sinai Medical Center, New York, presents *Care for the Dying Patient: A new frontier for medicine,* 3-4 p.m., N 225. Reception to follow on the Nursing Mezzanine.

ARTS & PERFORMANCES: See Nov. 13 listing. Showtimes: 6:30 and 8:45 p.m.

15 Saturday

UCSF ORCHESTRA: Participate in the UCSF Orchestra's 9th season, 8 p.m., St. Gregory's Presbyterian Church, 500 DeHaro, San Francisco. Concert will feature the Concerto for Violin and Cello by Johannes Brahms. Cost $7 general; $5 UCSF staff/faculty; $3 students. Call 476-2675.

17 Monday

MERGER SUPPORT GROUP: See Nov. 10 listing.

OPEN ENROLLMENT CARRIER FAIR: The Benefits & Financial Planning office presents an open enrollment fair for faculty and staff, 10 a.m.-1:30 p.m., Cole Hall. This is an opportunity to hear about UC-sponsored health plans. Call 476-1414.

DEAN'S RESEARCH SEMINAR: Professors Dean Sheppard, Rich Locksley and David Corry present *The Conundrum of Asthma,* 3:30 p.m., N 225. Sponsored by the School of Medicine. Call 476-2342.

BETTER VISION NOW: Douglas Holsclaw, assistant clinical professor of ophthalmology, presents Better Vision Now, 6 p.m., Beckman Vision Center, 8 Kirkham. Learn new surgery options for the correction of nearsightedness and astigmatism, from laser surgery to corneal implants.

18 Tuesday

NEW EMPLOYEE ORIENTATION: 8:30-10:30 a.m., S 214. Call Leonard Florendo at 476-1073 to schedule.

MERGER SUPPORT GROUP: See Nov. 10 listing.

CHINESE POET READS: Nellie Wong, senior analyst, affirmative action, presents *Readings from Stolen Moments,* noon, N 217. Her work explores Chinese-American culture. Sponsored by the Women's Resource Center. Free. Call 476-5222.

BROWN BAG LECTURE: Jess H. Ghannam, assistant clinical professor, psychiatry, presents *Managing Depression and the Holiday Blues,* noon, Mount Zion's Herbst Hall. Learn how to cope with loneliness and depression during the holidays. Free. Sponsored by Public Service Programs. Call 476-4394.

20 Thursday

TAY-SACHS SCREENING CLINIC FOR PREGNANT COUPLES: 9 a.m., UCSF Stanford Health Care. Call 476-4080 for an appointment.

UPCOMING EVENTS

Chefs offer tips on Thanksgiving feast

Millberry Programs and Services will be hosting a cooking class on Saturday, Nov. 8 from 9 a.m. to 1 p.m., in the MU Fitness Center. Learn how to master skills in roasting, meat carving, gravy making and much more from Professional Chef Kerry Ruff-Harcourt. Cost is $44 for students and members; $44 for employees; and $54 for the general public. Please register in advance by calling 476-1115.

The role of specialists

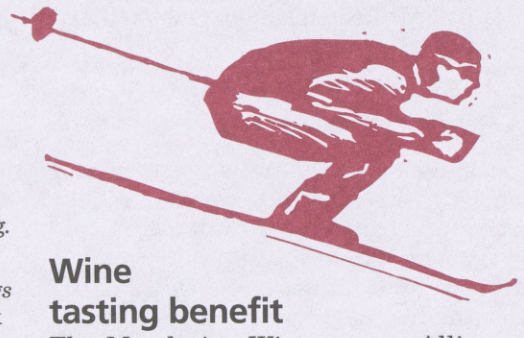
Robert M. Wachter, associate professor of clinical medicine and epidemiology, associate chairman, department of medicine and the chief of medical service at Moffitt-Long Hospitals, presents "The Changing Role of the Specialist in Managed Care," on Thursday, Nov. 13, from noon to 1 p.m., in N 225.

Mission Bay discussion

The San Francisco Museum of Modern Art (SFMOMA) is hosting a panel discussion entitled "Town and Gown: UCSF Research Campus at Mission Bay," on Thursday, Nov. 20, at 7 p.m., at SFMOMA's Phyllis Wattis Theater, 151 Third St. in San Francisco. This is the second in a series of lectures focusing on public spaces in the Bay Area. A group of distinguished panelists including Richard Sommer, CCAC associate professor of design and theory, and Michael Sorkin, architect and critic, will review and discuss the winning entries from the master plan competition for the new UCSF campus and current alternative viewpoints. The panel will be moderated by Byron Kuth, architect. Ticket prices are $9 general; $5 SFMOMA members, seniors and students with ID. This lecture is being sponsored by SFMOMA's Architecture and Design Forum. For more information, please call 357-4027.

Warm-up for snow sports party on Nov. 20

Outdoors Unlimited will be hosting a warm-up party on Thursday, Nov. 20, at 7 p.m. in the Outdoors Unlimited Rental Center. Beginners and old pros are welcome! Come check out their new boards, skis and gear. They'll have demos, slide shows, videos, and discussions on where to expect the best snow. Hot waxing will be available for $1. For more information, call Outdoors Unlimited at 476-2078.



Wine tasting benefit

The Mendocino Winegrowers Alliance will be hosting its annual wine tasting benefit, "Wine and Unwind," to benefit Family House on Friday, Nov. 21, from 6 to 9 p.m., at Fort Mason Center, Building A. Family House was founded in 1981, through the efforts of parents of children with cancer, doctors, nurses and volunteers. Family House is a home away from home where children with cancer and their families can stay free of charge while they receive treatment at UCSF.

The cost for this event is $35 per person. Parking is free. For further information, please contact Family House at 476-8321.

Wilderness medicine seminar

Outdoors Unlimited will be presenting an all-day seminar on Saturday, Nov. 22, from 9 a.m. to 5 p.m. The seminar will give up-to-date information on how to deal with a variety of wilderness hazards and medical problems. Guest speakers are authorities on their topics, which will include altitude illnesses, hypothermia, fractures and dislocations, and head and spinal injuries. Cost is $40 ($10 extra for CE credit). For more information, contact Bobbie Foster at 476-0417.

Holiday crafts fair

EMPACT! presents its 8th annual holiday crafts fair, Thursday, Dec. 4, 8 a.m. to 4 p.m. in the MU gym and conference center. This fair features handmade crafts created by UCSF employees and community artists. For more information, contact EMPACT! at 476-2675.

Art show & reception

The Faculty/Alumni House will be hosting an art show and reception on Friday, Dec. 5, from 5 to 7:30 p.m., at the Faculty/Alumni House at 745 Parnassus Ave. Artist Sherrie Smith will be showing her work, watercolors and pastels inspired by patterns in nature titled "Somewhere Between the Moon and the Sea." For additional information, please call Mary Beth Nelson at 476-2077.

Celebrate the season at holiday concert

Arts & Performances presents a special evening of music on Wednesday, Dec. 10, at 6 p.m. in the Lange Reading Room. This annual event will feature the all-student a cappella choir, The Vocal Chords, and special guest artists. Admission is free thanks to the support of the Sarah B. Childs Chamber Music Fund. For more information call 476-2675.

Molecular biologist to give Gladstone lecture

The Gladstone Distinguished Lecture in Neuroscience will be presented on Thursday, Dec. 11 by Richard Axel. He will speak at 4 p.m. in SFGH's Carr Auditorium on "The Molecular Biology of Smell."

Axel is Howard Hughes Medical Institute Investigator, Higgins Professor of Biochemistry and Molecular Biophysics, and professor of pathology, Columbia University. A molecular biologist who now applies the techniques of recombinant DNA and molecular genetics to problems in neurobiology, Axel has most recently focused on the molecular biology of perception and particularly of olfaction.

OU offers cabin rentals

Three cabins — one on the South Shore and two on the North Shore — are available to rent weekdays and weekends from December through April 1998. Reservations can be made now with Outdoors Unlimited for the modern cabins, which have full kitchens equipped with microwaves, coffee makers and dishwashers and feature four bedrooms that can sleep at least 10 people in beds. Cabins have two to three bathrooms plus fireplaces and central heating.

The cabin in South Lake Tahoe is near Heavenly Valley Ski Resort and the cabins on the north shore are located in Truckee and Tahoe City. Midweek rates, for noon Sunday through noon Friday, are $150 per night for students and Millberry Union members and $160 per night for Outdoors Unlimited volunteers and UCSF employees. Weekend rates, for noon Friday to noon Sunday, are $425 for students and Millberry Union members, and $440 for Outdoors Unlimited volunteers and UCSF employees.

Stop by the Outdoors Unlimited Rental Center to view floor plans and get more details or call 476-2078.